Exercise 3 - Move and Resize

- Execute edm

- Open /home/student#/exercises/exercise3.edl (use *Path* menu)

- This display file contains several objects

Location and Size Object Properties

- Edit the red rectangle
    - Change the size properties as follows
        - Width = 200
        - Height = 150
        - Click *Apply* to apply changes
    - Change location as follows
        - X = 200
        - Y = 50
        - Click *OK* to apply changes and terminate the edit

Interactive Move Operations

- Select the blue circle
    - Move the mouse inside the selected object and press and hold the left mouse button
    - Move the mouse, this moves the selected object
    - Release the mouse button to terminate the move operation
    - Repeat the move operation as described above
    - With the mouse button still pressed, press an arrow key on the keyboard
        - Do not release the mouse button
        - The mode has changed and now the object cannot be moved by moving the mouse (observe this by moving the mouse)
        - Pressing up arrow, down arrow, left arrow, or right arrow moves the object one pixel at a time in the corresponding direction
        - Release the mouse button to terminate the move operation

- You may move an object with arrow keys without the mouse
    - Select the red rectangle
    - Move the mouse inside the selected object and press an arrow key on the keyboard
    - Pressing up arrow, down arrow, left arrow, or right arrow continues to move the object one pixel at a time in the corresponding direction
    - Click the left mouse button to terminate the move operation

Interactive Resize Operations

- Select the blue circle
  - Move the mouse inside one of the eight control regions surrounding the selected object and press and hold the left mouse button
  - Move the mouse, this resizes the selected object
  - Release the mouse button to terminate the resize operation
  - Repeat the resize operation as described above using different control regions and note that cornet controls allow the resize to take place in any direction whereas middle controls constrain the resize vertically for left and right controls and horizontally for top and bottom controls
  - Once again, repeat the resize operation as described above
  - With the mouse button still pressed, press an arrow key on the keyboard
    - Do not release the mouse button
    - The mode has changed and now the object cannot be resized by moving the mouse (observe this by moving the mouse)
    - Pressing up arrow, down arrow, left arrow, or right arrow continues to resize the object one pixel at a time in the corresponding direction
    - Note that the constraints described above still apply
    - Release the mouse button to terminate the move operation

- You may resize an object with arrow keys without the mouse
  - Select the red rectangle
  - Move the mouse inside one of the eight control regions surrounding the selected object and press an arrow key on the keyboard
  - Pressing up arrow, down arrow, left arrow, or right arrow resizes the object one pixel at a time in the corresponding direction
  - Note that the constraints described above still apply
  - Click the left mouse button to terminate the resize operation

Moving a Very Small Object

- Locate the tiny yellow rectangle and try to move it interactively, with the mouse
- Because the control regions overlap and enclose the entire object, any move attempt results in a resize

- You may perform the move it as follows:
  - Select the object
  - Move the mouse inside the selected object, press the ctrl key on the keyboard, and then press and hold the left mouse button
  - Now, when you move the mouse, the object should move with it

- Pressing the ctrl key on the keyboard prevents the object from being resized and forces a move operation instead

Moving and Resizing Groups of Objects

- Select the red rectange and the blue ellipse

- Experiment with the move and resize operations with both objects selected

- The group of selected objects may be moved and resized in a manner similar to that for a single object
  - The move operation is identical to that for a single object
  - The resize operation modifies the position of some objects in the group

Close Display File

- Close the display file and abort changes to complete this exercise.